

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A method for improving radiostability of a ^{18}F -fluor-deoxy-glucose (^{18}F -FDG)-solution during autoclaving, **which the method comprising comprises the steps of:**

- a) providing a ^{18}F -fluor-deoxy-glucose (^{18}F -FDG)-solution, **[[and]]**
- b) adding at least one buffer based on a weak acid to the ^{18}F -fluor-deoxy-glucose (^{18}F -FDG)-solution, **wherein the buffer is selected from the group consisting of citrate, acetate, ascorbate and combinations thereof; and,**
- c) autoclaving the buffered ^{18}F -fluor-deoxy-glucose (^{18}F -FDG)-solution.**

2. (Previously Presented) The method according to claim 1, wherein the buffered ^{18}F -FDG-solution maintains radiochemical purity after being autoclaved, thus rendering the solution suitable for medical applications.

3-4. (Cancelled)

5. (Currently Amended) The method according to claim **[[4]] 1**, wherein the pH of the citrate buffer is lower than 5.5.

6. (Withdrawn – Currently Amended) The method according to claim **[[4]] 1**, wherein the pH of the acetate buffer is **between 3.0 and 5.5.**

7. (Withdrawn – Currently Amended) The method according to claim **[[4]] 1**, wherein the pH of the ascorbate buffer is **between 3.0 and 5.5.**

8. (Withdrawn – Currently Amended) **[[A]] The method of preparing a sterile- ^{18}F -fluor-deoxy-glucose (^{18}F -FDG) solution by autoclaving a according to claim 1, wherein the buffered ^{18}F -fluor-deoxy-glucose (FDG)-solution is autoclaved at a temperature between 110°C and 145°C.**

9. (Withdrawn – Currently Amended) **[[A]] The method of preparing a sterile-¹⁸F-fluor-deoxy-glucose (¹⁸F-FDG)-solution by autoclaving a according to claim 1, wherein the buffered ¹⁸F-fluor-deoxy-glucose (FDG)-solution is autoclaved at a temperature between 130°C and 140°C.**

10. (Withdrawn – Currently Amended) **[[A]] The method of preparing a sterile-¹⁸F-fluor-deoxy-glucose (¹⁸F-FDG)-solution by autoclaving a according to claim 1, wherein the buffered ¹⁸F-fluor-deoxy-glucose (FDG)-solution is autoclaved at a temperature of 134°C.**

11. (Withdrawn – Currently Amended) The method according to claim 8, wherein **[[the]] autoclaving process** is performed for a period of 1 to 30 minutes.

12. (Withdrawn – Currently Amended) The method according to claim 8, wherein **[[the]] autoclaving process** is performed for a period of 1 to 10 minutes.

13. (Withdrawn – Currently Amended) The method according to claim 8, wherein **[[the]] autoclaving process** is performed for a period of 2 to 5 minutes.

14. (Withdrawn – Currently Amended) A ¹⁸F-fluor-deoxy-glucose (¹⁸F-FDG)-solution **with improved physical/chemical characteristics** obtained by the method of claim 1.

15. (Withdrawn) A ¹⁸F-fluor-deoxy-glucose (¹⁸F-FDG)-solution obtained by the method of claim 8.

16. (Currently Amended) The method of claim **[[1]] 2**, wherein the radiochemical purity of the buffered ¹⁸F-fluor-deoxy-glucose (¹⁸F-FDG)-solution is at least 95%.

17. (Currently Amended) The method accordingly to claim 16, wherein **the radiochemical purity of the buffered ¹⁸F-FDG-solution** is at least about 95% eight hours after being autoclaved.

18. (Previously Presented) The method according to claim 5, wherein the pH of the citrate buffer is between 2 and 5.5.